

Name _____ Hr _____ Parent Signature _____

Study Guide for LS2 & LS3

1. **Draw and label** a diagram of the sun's rays hitting Earth both **directly and indirectly**. **Draw and label the axis** and the **equator** on your drawing. **Place polka dots** on the location on Earth that has the **smallest change in temperatures during the year**.

2. Describe the difference between a revolution and rotation. Be sure to include the number of days for each.

3. The **trends** in the data provide you with some evidence to understand the relationships between planet tilt, solar energy, and temperature. What does the word **trend** mean?

4. What are the three components of a good explanation? In which part might you find information on the trends found in the data?

5. Describe the difference between the change in temperatures throughout the year at both the poles and the equator. What accounts for the differences between these locations.

6. **Describe** the following biomes and list the latitudes that they would commonly be found.

Temperate forest –

Tundra –

Rainforest –

Fill in the blanks

7. Lines of _____ measure the distance north or south of the equator and lines of _____ measure the distance east or west of the prime meridian.

8. **Fill in the chart below** – List the season and what solstice or equinox is occurring on that date.

	June 20	September 21	December 21	March 20
Northern Hemisphere				
Southern Hemisphere				

****On the above chart, circle the time when daylight hours start to decrease each day until the winter solstice.

Circle the correct answer

9. An equinox means that it is a period of time when day and night hours are equal. We have an equinox in (Summer and Winter) or (Spring and Fall)?

10. Define:

Ellipse –

Biome –

11. Explain how it is possible for the poles to receive 24-hour periods of darkness or light.

Circle the correct answer

12. What happens to the number of daylight hours after the winter solstice ? Increase or decrease

13. What happens to the number of daylight hours after the summer solstice? Increase or decrease

14. Essay

Choose **one** of the following questions and answer it in essay format. Include a topic sentence and a minimum of 3 supporting details. Think about the investigations for each question and use data to support your answer.

How Does a Planet's Tilt Affect Surface Temperatures?

How Does a Planet's Shape Affect Surface Temperatures?